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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,347	02/07/2002	Koichiro Kishima	SON-2363	4610

23353 7590 12/17/2003

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EXAMINER

PAK, SUNG H

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,347	KISHIMA, KOICHIRO	
	Examiner	Art Unit	
	Sung H. Pak	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1003. 6) ☐ Other: _____

DETAILED ACTION

Applicant's amendment filed September 30, 2003 has been entered. Claims 1-49 have been cancelled and new claims 50-79 were added by the amendment. All pending claims have been carefully reviewed, however they are still unpatentable. Prior ground of rejection is hereby withdrawn due to the cancellation of claims 1-49, and a new ground of rejection is provided in this office action in response to the newly added claims 50-79.

Information Disclosure Statement

All references cited in the information disclosure statement have been considered by the examiner. Please refer to PTO-1449 enclosed herewith.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 50-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Althaus et al (US 6,434,297 B1).

Althaus et al reference was cited in the previous office action.

Althaus et al reference discloses an optical device with all the limitations set forth in the claims including: an optical lens array including a lens substrate made from an optical material having a plurality of convex portions (Fig. 3, "10"); a convex portion of the plurality of convex portions having a convex shape and comprising a material the same as that of the lens substrate (Fig. 3); the lens substrate having a mask layer on the surface thereof (Fig. 3, "13"); the mask layer comprising a material different than the lens substrate (column 3 line 52); the overall height of the convex portion being specified, i.e. dependent, on the thickness and the diameter of the mask layer (Fig. 3, "10"+"4"); the curvature of the convex portion also defined by the thickness of the mask layer (Fig. 3); wherein the plurality of convex portions are arrayed on the lens substrate (Fig. 3); wherein the optical material is silicon oxide (column 3 lines 47-48); wherein the convex portion is an optical lens portion (abstract); wherein the mask layer portion is removed and lens substrate portions are removed from each other simultaneously (Fig. 3); wherein the mask layer portion of the plurality of mask layer portion is separate and distinct from adjacent plurality of mask layer portions (Fig. 3, "4"); wherein the lens substrate is exposed between the mask layer portion and adjacent mask layer portion (Fig. 3); wherein the mask layer portion has a curved surface (Fig. 3, "10", "4"); wherein the mask layer portion correspond to a formation region of the convex portion (Fig. 3); wherein a light absorber having aperture is formed on the lens substrate (Fig. 3, "4").

Response to Arguments

In applicant's remark, it is argued that neither Althaus et al reference, nor Knapp et al reference teach or suggest "the height of the convex portion being specified on the basis of a thickness of a mask layer" as claimed in the newly added claims.

However, the examiner respectfully points out that Althaus et al reference, read broadly, does disclose the height of the convex portion being specified on the basis of a thickness of a mask layer. That is, the thickness of a mask layer contributes and determines the overall height of the resulting convex portion of the lens substrate (Fig. 3). The thicker the mask layer, the greater the height of the convex portion. Therefore, Althaus et al reference fully anticipates the recited limitations, and the rejection is proper.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 65-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Althaus et al (US 6,434,297 B1) in view of Knapp et al (US 5,768,456).

Knapp et al reference was cited in the information disclosure statement.

Althaus et al reference discloses an optical device with all the limitations set forth in the claims as discussed above, except it does not teach the use of light emitting diode array and light receiving optical fiber arrays as recited in the claims.

Knapp et al reference teaches the use of a lens substrate containing plurality of convex lens portions with laser diode array or photodiode array (Figs. 3, Fig. 4); optical fiber arrays (Fig. 5); wherein the outer peripheral portions of adjacent two plurality of optical fiber arrays are in contact with each other (Fig. 5). Knapp et al reference teaches that such an optoelectronic package is advantageous and desirable because it allows for precise alignment between optoelectronic device and optical transmitting device (column 1 lines 53-63). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Althaus et al device to have a plurality of laser or photodiode array and optical fiber array as taught by Knapp et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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Art Unit: 2874

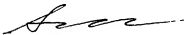
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Sung H. Pak
Examiner
Art Unit 2874

sp

